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ABSTRACT

Trends in the characteristics of students who go directly on to college after completing high school have been surveyed for the past 16 years. Findings on significant trends are cited and analyzed: (1) Students are less well prepared academically than entering students of 10 or 15 years ago. (2) Declining academic skill levels are reflected in the declining rate of college attendance among high school graduates (especially white males) and the sharp decline in student majors in mathematics and fields that require verbal skills. (3) Declining academic skills have been accompanied by declines in other areas of student competency and declining interest among male students in pursuing graduate study. (4) Today's students are more interested in business, engineering, and computer science, and less interested in education, social science, fine and performing arts, and the humanities. (5) Today's students are more materialistic, more interested in power and status, less altruistic, and less inclined to be concerned about social issues and problems. (6) Freshmen of today are substantially less liberal in their political identification than freshmen of 10 years ago. (7) Compared to earlier generations, today's female college students are more likely to be pursuing careers in business, medicine, law, and engineering, and significantly less likely to pursue careers in teaching and nursing. (8) There have been substantial increases in representation of women and disadvantaged minorities among entering freshmen. (JD)

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The American Freshman, 1966-1981: Some Implications for Educational Policy and Practice*

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In this paper I shall present a portrait of today's college freshmen, and discuss some of the dramatic changes that have taken place in college freshman during the past fifteen years. While the report emphasizes issues related to the student's secondary school preparation, abilities, and academic motivation, it will also examine trends in students' intended fields of study, career plans, attitudes, and personal values. As the various data and research findings are presented, I shall attempt to point out their possible implications for the pursuit of excellence in our schools and colleges.

Evidence to be Cited

A primary source of data for this analysis is the Cooperative Institutional Research Program (CIRP), an annual survey of new college freshmen conducted jointly by UCLA and the American Council on Education (Astin, King, and Richardson, 1982) Each year this survey, which has been conducted each fall for the past sixteen years (1966-1981), include some 300,000 full time students constituting the entering freshmen classes at a nationally representative sample of approximately 600 two-year colleges, four-year colleges, and universities across the United States. Results from each CIRP survey are weighted to reflect the total population of approximately 1.73 million freshmen entering college each fall. Since most of this population (94 percent) are entering college directly out of high school, trends in the characteristics

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of these freshmen provide important clues about changes in our secondary schools during the past fifteen years. In addition to results from these annual CIRP surveys of entering freshmen, I shall also cite, where appropriate, findings from other national studies that deal with the transition from high school to college.

The results from these various sources will be summarized and discussed under eight major headings: academic preparation, study plans, career plans, demographic characteristics, personal values, attitudes, behavior, and self-concept.

Academic Preparation

The most widely publicized evidence concerning recent trends in the academic preparation of college-bound secondary school students comes from the national testing organizations, the College Entrance Examination Board and the American College Testing Program. Both of these organizations have reported steady declines in the overall performance of students taking their tests since the early 1960s. On the College Board's Scholastic Aptitude Test (SAT), for example, there was a decline of 55 points in the average Verbal score (from 478 to 423), and a decline of 35 points on the Mathematics score (from 502 to 467) (Austin and Garber, 1982). These declines, which were paralleled by similar declines in the average scores of students taking the American College Test, are substantial and appear to reflect a significant decline in students' academic skills.

That these declines in college admissions test scores are not an isolated event is suggested by a number of trends in the annual CIRP surveys of entering freshmen. Two out of every five students (40 percent) among today's freshmen say that a "very important" reason for deciding to go to college was "to

improve my reading and study skills." This figure is nearly double what it was (22 percent) in 1971 (the first year in which this question was included in the survey). Similarly, during the past ten years the number of freshmen who report they will need "tutoring help in specific courses" nearly doubled (from 6 to 10 percent). Finally, today's students are somewhat less inclined to rate themselves above average in academic ability (52 percent, compared to 57 percent in 1966). This downward trend in the students' academic-self concept is all the more remarkable when one realizes that today's student's are generally inclined to see themselves in a more positive light: compared to 1966 freshmen, today's freshmen rate themselves significantly higher on 17 of 19 traits (see below).

Considering these trends, it perhaps surprising that the students' high school grades have increased dramatically during the same period. Figure 1 shows that, beginning in 1969, the percentage of students reporting A averages from secondary school climbed steadily while the percentage reporting C+ or lower averages declined. The magnitude of these trends is substantial: whereas in the late 1960s students with C averages outnumbered those with A averages by better than two-two-one, among today's freshmen the A students actually outnumber the C students. It may be worth noting that these trends peaked in 1978 and have actually regressed slightly in the three years since then. Nevertheless, today's freshman report much higher grades from high school than the freshmen of the 1960s.

The possibility that we are witnessing a real "grade inflation" at the secondary school level is supported by the students themselves: a solid majority of 1981 freshmen (58 percent) agree that "grading in the high schools has become too easy." This figure is identical to the one for freshmen of 1976 (the first year in which the question was included in the

survey), but represents a moderate drop from the figure for the 1978 (64 percent). The year 1978 was, of course, the year when high school grade inflation reached its peak (see Figure 1).

Even though the students appear to realize that grading standards have declined in the secondary schools, grade inflation has prompted many of them to become more optimistic in their academic expectations for college. Thus, since 1967 there has been a substantial increase in the percentages of students who expect at least a B average in college (from 24 to 41 percent), to be elected to an academic honor society (from 3 to 7 percent), and to graduate with honors (from 4 to 11 percent). At the same time, there has been a decline in the percentage of students who expect to fail one or more courses in college (from 2.9 to 1.7 percent).

Even though the combination of declining test scores and increasing high school grades may appear contradictory, there is reason to believe that grade inflation is just another symptom of declining academic skills. A number of studies from various states suggest that changes in the high school curriculum may have been in part reasonsible for declining test scores and increasing grades. Students appear to be taking fewer solid academic subjects (particularly in English) and more "soft" electives (Austin and Garber, 1982). Since the grading standards in these electives are likely to be less stringent than those in the basic academic courses, this shift would tend to inflate students' grade averages while simultaneously impeding the development of basic academic skills. While such curricular shifts are probably not the sole explanation for these trends in grades and test scores, there is reason to believe that they explain some of these shifts.

Evidence to be discussed more fully in the next section suggests that today's students are very reluctant to undertake courses of study in college

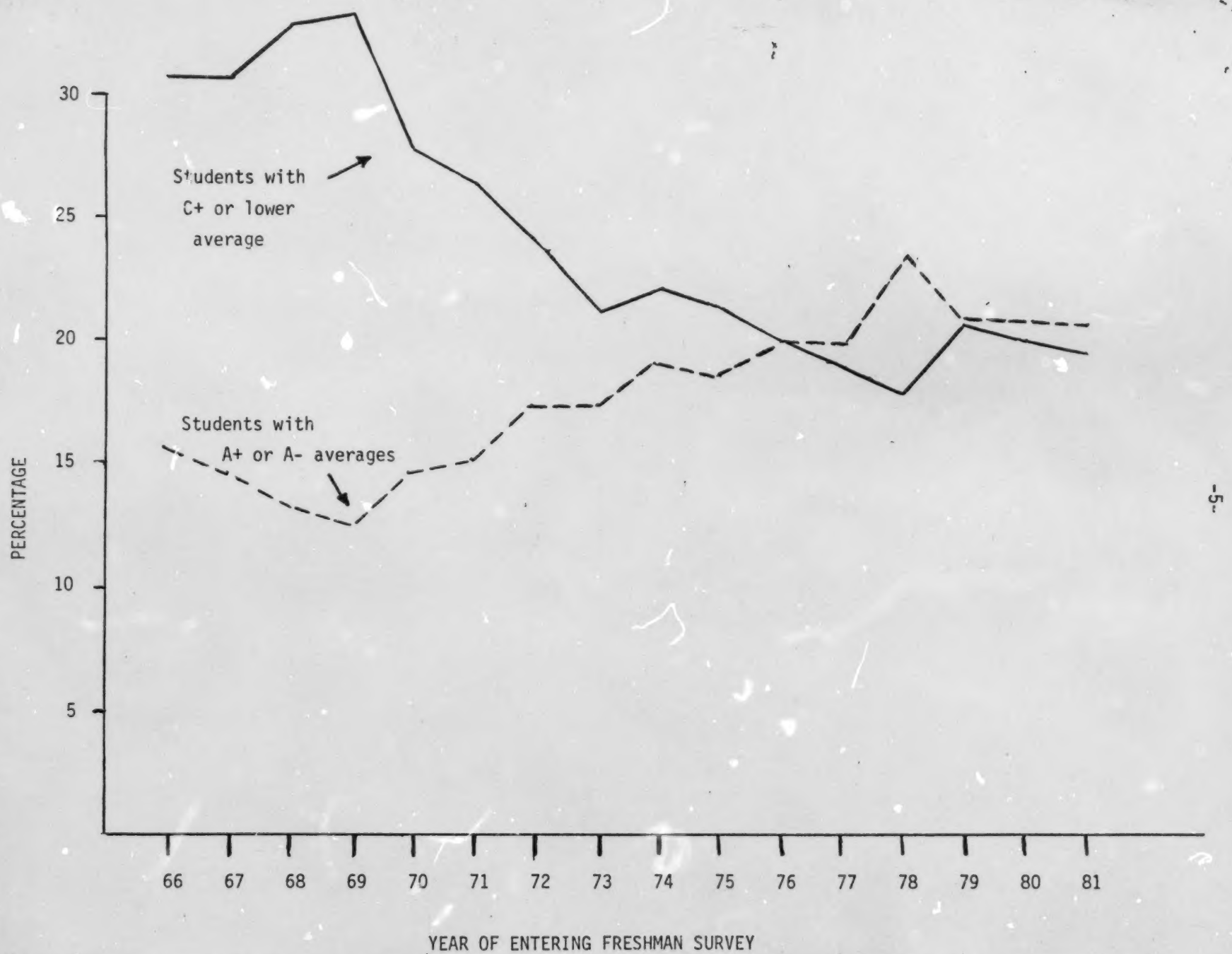

Figure 1: Trends in the average high school grades of entering college freshman, 1966-1981.

that challenge their academic skills, and in particular their verbal skills. Thus, there has been a sharp decline since the 1960s in the percentages of freshmen who intended to major in English, foreign languages, history, and philosophy (see the next section for more details). As far as intellectual demands are concerned, the common threads that tie these fields together are reading ability, critical and analytical thinking, and skill in composition.

Further support for the assumption that these declines in academic skills are real comes from the college faculty themselves. When asked recently about the quality of academic preparation of today's students compared to those of the 1970s, more than 80 percent of a national sample of college faculty reported that the situation had either not changed or was worse than what it was in the 1970s (Minter and Bowen, 1982). For each professor that felt things had gotten better, there were two or more who felt that they had gotten worse. These perceptions applied regardless of the type of institution and regardless of the academic skill being rated (reading, writing, mathematics, sciences, and so forth).

Still other evidence that students' academic skills are declining is the reduction since the 1960s in the percentage of high school graduates who go on to college. Even among students in the top ability quarter of their high school classes, there has been a substantial decline in the percentage who go on to four-year colleges (Peng, 1977). These declines were most pronounced among white males, suggesting that, if it were not for the countervailing effects of the Civil Rights and the Women's Movements, which probably encouraged more minorities and women to attend college, the decline in college-going rates would have been substantially greater.

The reason why declining academic ability would be expected to lead to declining college attendence rates is suggested by recent results from the

National Longitudinal Study (Fetters, Dunteman, and Peng, 1977). These investigators examined characteristics of high school seniors that were related to their decision about whether or not to go on to college. Their results show clearly that the students' academic ability was the most important factor (in comparison to sex, race, or social status) in the students' eventual decision to attend college.

Other evidence of declining student skills comes from a special set of items which were included in 1967 survey and repeated 10 years later in the 1977 survey. Whereas nearly half (49 percent) of the 1967 freshmen said they could describe the personal freedoms guaranteed by the Bill of Rights, this figure had dropped to only 30 percent by 1977. A similar decline (from 41 to 22 percent) occurred in the percentage who knew the difference between stocks and bonds. Additional declines were noted in the students' musical knowledge and competence: fewer students were able to sight read piano music (21 percent in 1967 compared to 18 percent in 1977), to sight sing (31 percent versus 23 percent), and to "identify many classical musical compositions by titles and composer (13 percent versus 8 percent). One of the few competencies that increased significantly during the 10 year period was knowledge of how to program a computer, which rose from 2.0 to 5.2 percent between 1967 and 1977.

Study Plans

Despite these declines in academic skills during the past 15 years, more students than ever are aspiring to advanced study beyond the bachelor's degree. Most of these increases have occurred in the high level graduate and professional degrees: PhD or EdD, medical or dental degrees, and law degrees. Between 1966 and 1981 the percentage of entering freshmen aspiring to such degrees increased from 15 to 18. This modest increase obscures the fact that

student motivation for the PhD or EdD declined somewhat (from 9.8 to 7.9 percent), whereas there was increased interest in medical degrees (from 4.1 to 5.9 percent) and law degrees (from 1.4 to 4.0 percent).

Even larger differences in degree aspirations can be found by comparing men and women. Figure 2 shows trends during the past 15 years in aspirations for high level doctoral or professional degrees separately for men and women. Whereas the percentage of male freshmen aspiring to these degrees actually declined during the 15 year period (from 22 to less than 20 percent), the percentage of women aspiring to such degrees more than doubled (from 7 to 16 percent). While the percent of men aspiring to PhDs or EdDs was declining sharply (from 14 to 9 percent), the percentage of women aspiring to such degrees increased (from 5 to 7 percent). And although the percent of men aspiring to medical degrees increased slightly (from 5.9 to 6.3 percent), the percent of women aspiring to medical degrees more than tripled (from 1.8 to 5.6 percent). Similarly, while the percent of men aspiring to law degrees doubled (from 2.2 to 4.5 percent), the percent of women aspiring to law degrees increased more than ten times (from .3 to 3.5 percent).

These differential trends in degree aspirations for men and women no doubt reflect the effects of the Women's Movement, a conclusion which is reinforced by practically all other sex differences reported below. Note, for example, that the increases in women's degree aspirations began in 1969, at a time when the Women's Movement was beginning to capture the attention of the media. And although the trends for women have more or less stabilized since 1977, men's aspirations for high level degrees have actually declined since that time.

Some of the most radical changes in both men and women freshmen have occured in their fields of study. Several fields have shown decided increases

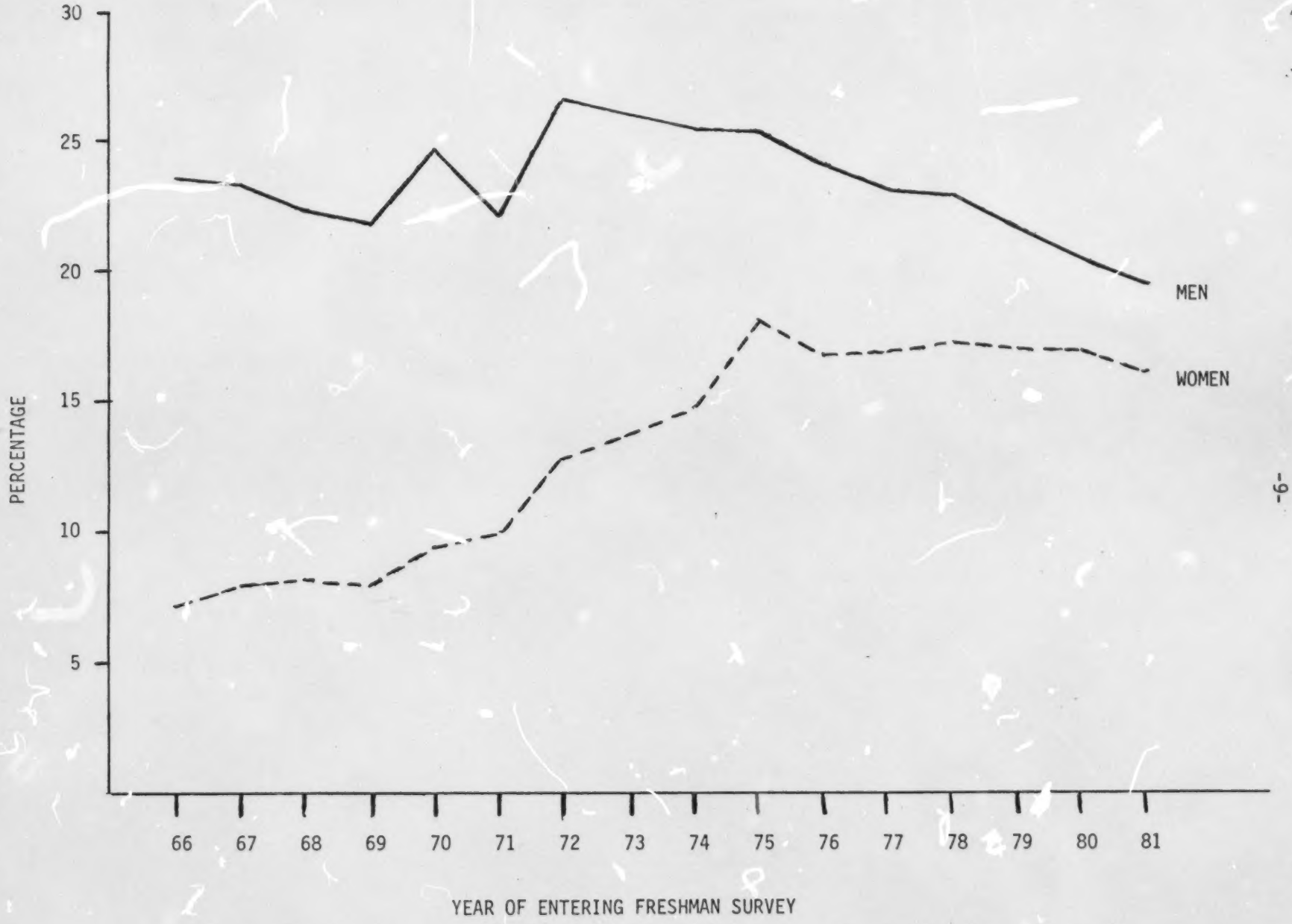

Figure 2: Trends, by sex, in percentage of freshmen aspiring for doctoral (Ph.D., Ed.D.) and high level professional degrees (LL.B., J.D., M.D., D.D.S.).

in popularity, whereas others have shown decreases in popularity so sharp that they suggest a need for a major revision of the college curriculum. By far the biggest gainer during this period of time has been the field of business (Figure 3), which included such specific majors as accounting, business administration, management, marketing, and financing. Between 1966 and 1981, interest in some field of business increased by more than half (from 13 to 22 percent). Again we see dramatic differences between the sexes: men showed a modest increase (from 16 to 23 percent) whereas the percentage of women planning to major in business nearly tripled (from 7 to 21 percent).

Other fields which have shown a substantial increases in popularity since 1966 are computer science (from 0 to 3.5 percent), engineering (from 9.8 to 12.0 percent), and agriculture and forestry (from 1.9 to 3.7 percent). Although men still outnumber women substantially in engineering (21 versus 3 percent) and agriculture-forestry (5.0 versus 2.3 percent), the relative increases for women have been substantially greater in these fields. Thus, in 1966 male engineering majors outnumbered female engineering majors by more than 50 to 1; by 1981 the ratio had been reduced to 7 to 1. Comparable ratios for agriculture-forestry declined from 30 to 1 to about 2 to 1 during the fifteen year interval. The field of computer science, which had virtually no majors until the early 1970s, is almost equally represented among men (3.9 percent) and women (3.2 percent).

While the fields of business and technology have been enjoying increasing popularity during recent years, many of the traditional liberal arts fields have witnessed what can only be described as a bear market. Especially sharp declines in popularity have occurred in the humanities (English, foreign language, philosophy, theology), the arts (art, music, speech, and theater), the social sciences (anthropology, economics, geography, history, political

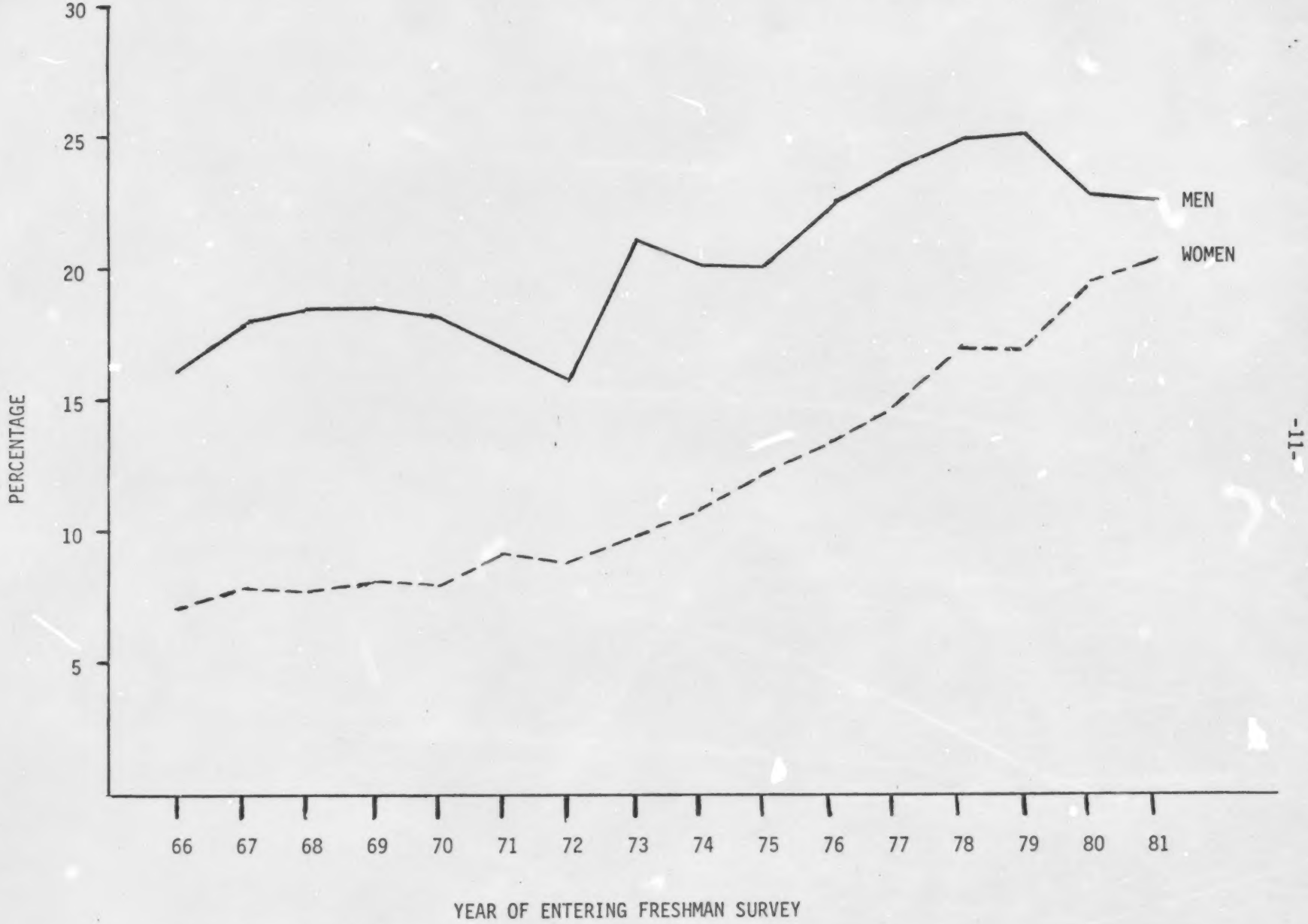

Figure 3: Trends, by sex, in the percentage of freshmen planning to major in some field of business.

science, psychology, social work and sociology)*, and mathematics. Figure 4 charts the dramatic declines in these four major field groupings since 1966. If we consider the first three broad categories shown in Figure 4--the arts, humanities and social sciences--the magnitude of the overall trends are quite dramatic. Thus, these three broad fields accounted for nearly one-third of all freshmen in 1966, but only about one-ninth in 1981. Although the declines for men and women were comparable for most fields, some individual fields within these broad categories showed especially sharp declines. The field of English, for example, lost more than 80 percent of its students (from 4.4 to .9 percent) between 1966 and 1981.

Another field showing sharp declines during the fifteen year interval was education, which accounted for 11 percent of the freshmen choices in 1966 but only 7 percent in 1981. Although the declines in education majors were proportionate for men and for women, most of the overall decline is accounted for by women because of their greater concentration among education majors. Thus, the percent of women majoring in education declined from 18 to 11, compared to a decline of 5 to 3 percent among the men. Further discussion of the significance of these declines in education majors appears in the next section on career choices.

Trends for student interest in the natural sciences showed mixed results for the sixteen year period. Among men, there was a modest decline in interest in majoring in the physical sciences (from 9.2 percent to 7.4 percent) between 1966 and 1981. Women on the other hand, showed a slight increase in interest in the physical sciences (from 4.3 to 5.3 percent). Overall, the physical sciences (astronomy, chemistry, earth science, and physics) showed a slight

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*Economics, which has increased slightly in popularity in recent years (from .3 to .4 percent since 1977) is the only exception to the general decline in the social sciences.

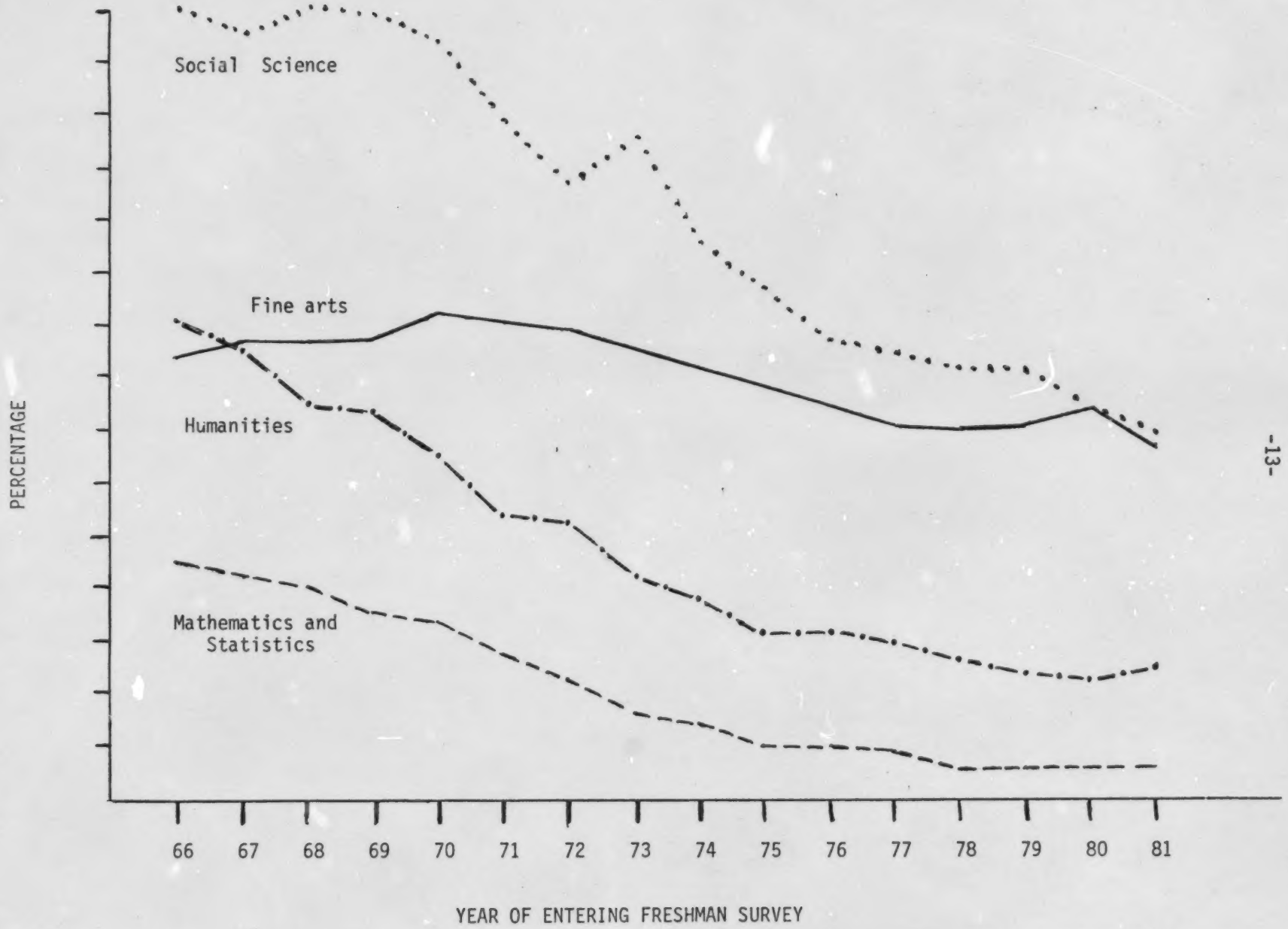

Figure 4: Trends in percentage of freshmen planning to major in the social sciences, humanities, fine and performing arts and mathematics.

decline (from 3.3 to 2.7 percent) between 1966 and 1981, whereas the biological sciences (biology, botony, and zoology) showed no change (3.7 percent for both years).

One final result of some possible significance concerns trends in the number of students who were undecided about a potential major when they entered college. The percentage of undecided men has doubled since 1966 (from 1.9 to 3.9 percent), while the percentage of undecided women has tripled (from 1.8 to 5.4 percent).

To what extent are these fifteen year trends also characteristic of the past five years? To examine more recent trends, we identified those major fields which showed significant increases or decreases between 1977 and 1981 (Table 1). Here we see a pattern very much resembling the fifteen year pattern that we have already discussed, although there are some notable exceptions. The allied health professions (nursing, medical technology, etc.), for example, which showed relatively little overall change in popularity between 1966 and 1977, have actually shown a moderate decline in popularity during the past five years. Also, the biological sciences, which showed no change in popularity during the fifteen year interval, have actually declined significantly in popularity during the past five years. As a matter of fact, virtually every category of major field associated with the traditional liberal arts education has been on the decline during the past five years.

The fields showing significant increases during the past five years are very similar to those showing increases over the fifteen year interval. Although business as a general field has shown only a modest 7 percent increase since 1977, this figure is somewhat misleading because one of the largest individual fields of business--accounting--actually showed a significant decline (from 6.4 to 5.8 percent) between 1977 and 1981. All other fields

TABLE 1

RECENT TRENDS (1977-1981) IN COLLEGE FRESHMEN CHOICES OF MAJOR FIELDS

Increases			Decreases		
Field	Percent Choosing in 1981	Relative Percentage Increase Since 1977	Field	Percent Choosing in 1981	Relative Percentage Decline Since 1977
Business	23.7	+ 7	Education	7.1	-18
Engineering	12.0	+ 29	Social sciences	6.2	-19
Computer scierce	3.5	+250	Allied health	5.8	-11
Data processing	3.0	+100	Biological sciences	3.7	-21
Communications	2.1	+ 50	Physical sciences	2.7	-13
			Humanities	2.4	-17
			Secretarial studies	2.4	-23

Source: Astin, King, and Richardson (1982).

of business--management, marketing, business administration, and finance--showed significant increases between 1977 and 1981. The same is true for all subfields of engineering with the exception of civil engineering, which showed no change in popularity during the past five years.

While it is difficult to know all the reasons for these patterns of changes in students' majors, it seems clear that at least several factors are at play. First is the declining academic skill levels discussed in the previous section. This decline in skills, particularily verbal skills, may in part account for the increasing reluctance of students to major in English, foreign language and other humanities fields that make demands on the students' verbal skills. Also, the tremendous increase in popularity of the field of business may also be in part attributable to the decline in academic skills, since recent research (Astin, 1977, 1982) shows that business tends to attract students with relatively low academic skill levels. It should be added, however, that education, which also attracts students with relatively low levels of academic skill (Astin, 1982) declined during this period.

Another possible reason for the shift in major fields relates to increasing student concern with making money (see below). Engineering and computer science are fields that offer high paying jobs to bachelor's degree recipients and business, of course, offers the possibility of very high-paying positions. Education and the humanities, of course, ordinarily lead to much lower-paying jobs.

These trends in students' major fields have profound implications for the quality of the college curriculum. The traditional liberal arts fields are clearly in serious trouble, and some of the fields (particularly mathematics and the humanities) are virtually moribund. The severe declines in student demand for such fields has no doubt forced many institutions to reduce the

size of their faculties in these fields, and may even have led to the elimination of these fields in some of the smaller institutions. Such changes in the composition of college faculty will make it increasingly difficult for institutions to offer undergraduate students anything resembling what has come to be regarded as a "liberal arts education." If a broad exposure of the undergraduate to the liberal arts and sciences is regarded as one critical element in a quality undergraduate education, then it seems clear that these trends pose a serious threat to the excellence of undergraduate education in the United States.

Career Plans

Trends in students' long-range career plans closely parallel trends in major field preferences discussed in the preceeding section. The career field showing the largest absolute increase in popularity since 1966 is business, which includes such careers as accountant, business executive, business owner, and salesman or buyer. Between 1966 and 1981 the popularity of these fields nearly doubled (from 11.6 to 19.6 percent of the entering freshmen). Once again, the increases for women were much more dramatic than the increases for men (see Figure 5). As a matter of fact, the proportion of women aspiring to careers in some field of business has increased more than five times since 1966.

Other choices showing significant increases between 1966 and 1981 were engineer (from 8.9 to 10.9 percent of the freshmen), nurse (from 2.5 to 3.9 percent), and undecided (from 5.0 to 8.8 percent).

The career of school teacher showed by far the greatest decline in popularity during the past fifteen years has been teacher. Figure 6 shows the fifteen year trends in student interest in teaching careers at the elementary,

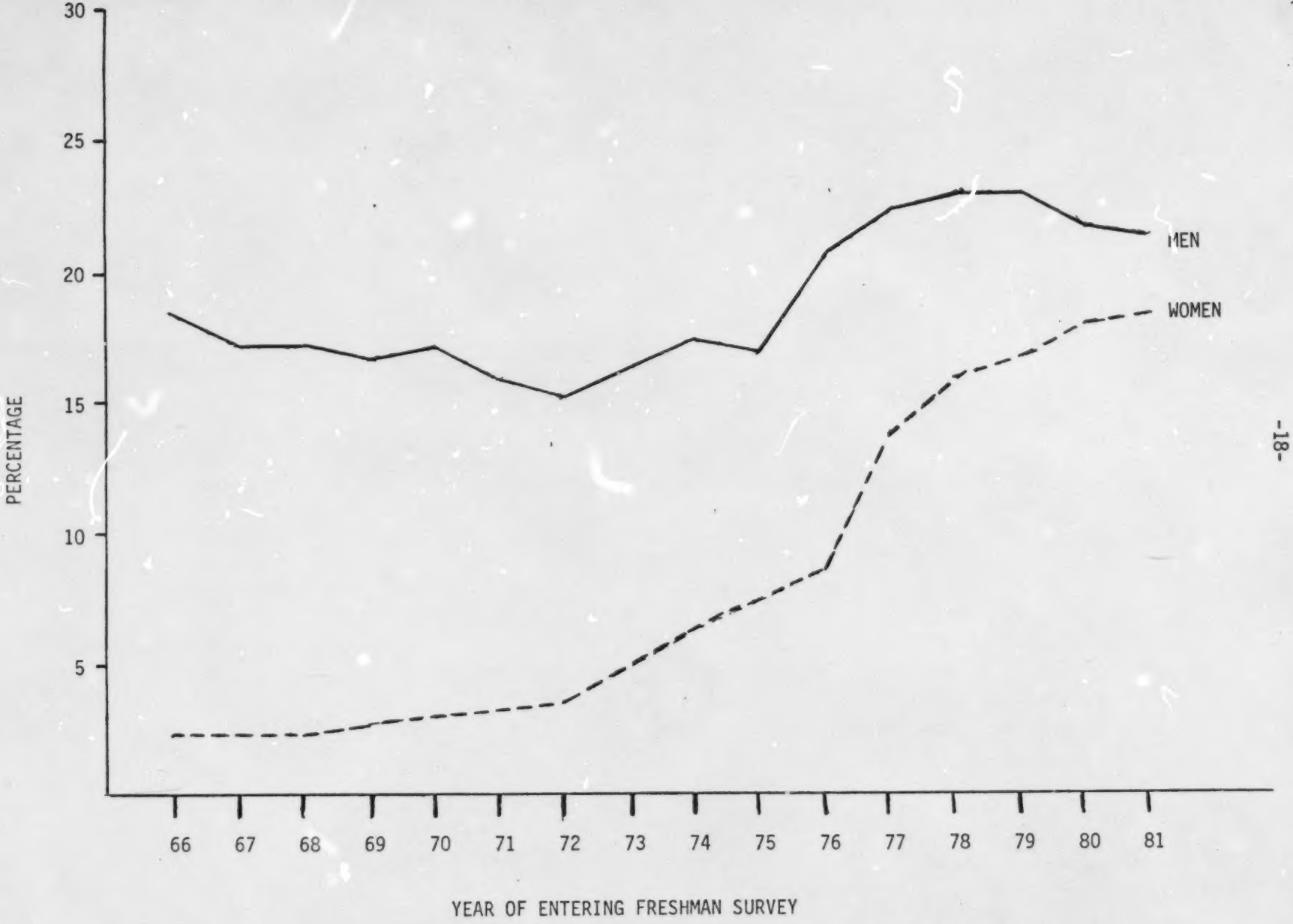

Figure 5: Trends, by sex, in the percent of freshmen aspiring to careers in business.

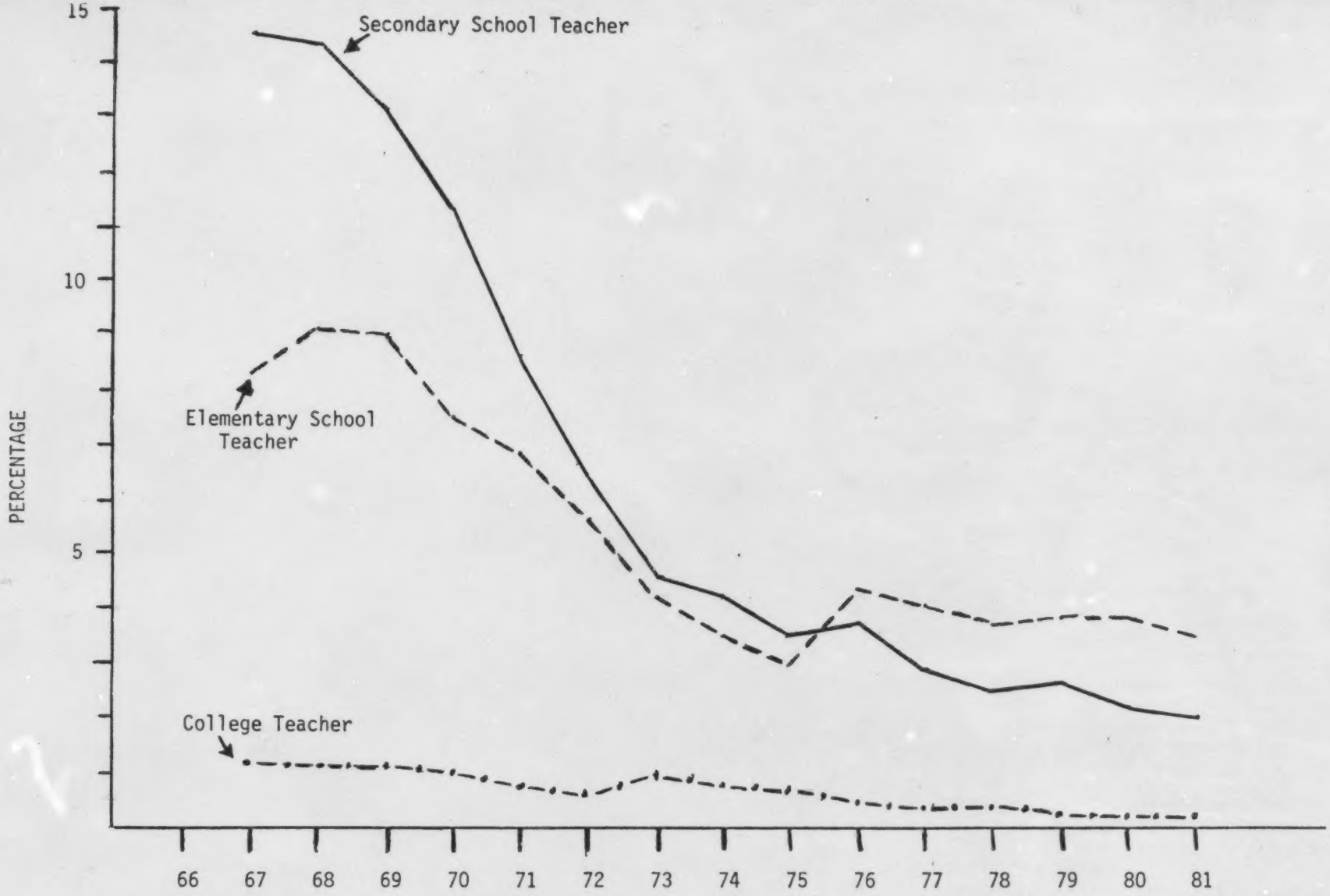

Figure 6: Trends in the precent of freshmen aspiring to teaching careers.

secondary,and college level. While there have been substantial declines at all three levels, the sharpest decline has occurred in the career of secondary school teacher. Whereas 1 in 7 of the 1966 freshmen aspired to become a secondary school teacher, only 1 in 50 of the 1981 freshmen aspired to a career in secondary school teaching. While there is little doubt that the declining popularity of school teaching was brought on in part by the widely publicized oversupply of school teachers during the late 1960s and early 1970s, the declines in popularity for such careers have been so pronounced that we may well be facing a shortage of teachers before too long. As a matter of fact, some school districts in several states are already reporting shortages of teachers in such fields as special education.

Two other career choices which have shown greater than 50 percent declines in popularity since 1966 are research scientist (from 3.5 to 1.6 percent of the freshmen) and clergyman (from 1.0 to .4 percent). It may be worth noting that both of these careers generally require advanced training beyond the bachelor's degree, and that none of the careers showing increased popularity (business, nursing, and engineering) requires such training.

Three careers showed mixed trends during the fifteen year interval: lawyer, physician, and performing artist. While the overall percentages of freshmen aspiring to such careers changed very little from 1966 and 1981, men and women showed quite different trends. Men, for example, showed declining interest in the careers of doctor (from 7.4 to 4.0 percent) and lawyer (from 6.7 to 4.5 percent), whereas women showed marked increases in these careers. Thus, the proportion of 1981 women freshmen aspiring to become lawyers (3.5 percent) represents a fivefold increase over the figure for 1966 (.7). Increases in the women's interest in medicine as a career was somewhat smaller, although substantial (1.7 percent in 1966 compared to 2.9 percent in 1981).

Interest in performing arts careers shows the opposite trend: more men aspired to such careers in 1981 than in 1966 (5.3 versus 4.6 percent), whereas interest among women declined somewhat (from 8.9 to 7.9 percent).

To what extent are these fifteen year trends characteristic of the past five years? Careers that have shown significant increases or decreases in popularity among entering freshmen since 1977 are listed in Table 2. Once again the pattern is very similar to the pattern for major fields shown in Table 1 (above). Careers that have shown increasing popularity during recent years do not generally require education beyond the bachelor's degree and are all relatively high-paying (writer-journalist being the one possible exception here). By contrast, the careers that showed decreasing popularity either require advanced training and/or are relatively low-paying. It is also of interest to note that the careers that are decreasing in popularity account for almost all of what have come to be known as "human service" occupations. This trend is consistent with results (see below) suggesting that student alturism and social concern has been on the decline.

Two other items from the freshmen surveys provide additional information about trends in students' career plans. Between 1967 and 1981, for example, there was a substantial decline (from 18 percent to 12 percent) in the numbers of freshmen who expected to change their career plans while in college. At the same time, there was a substantial increase between 1972 and 1981 in the percent of freshmen who felt that they would be able to "find a job after college in the field which you were trained" (from 52 to 71 percent).

Demographic Characteristics

In this section we shall discuss trends in five student demographic characteristics: sex, race, age, family income and finances, and parental education.

TABLE 2

RECENT TRENDS (1977-1981) IN COLLEGE FRESHMEN

CHOICES OF CAREERS

Increases			Decreases		
Career	Percent Choosing in 1981	Relative Percentage Increase Since 1977	Career	Percent Choosing in 1981	Relative Percentage Decline Since 1977
Businessman	20.7	+ 14	Nurse	3.9	-13
Engineer	10.9	+ 31	Elementary teacher	3.5	-13
Computer scientist	6.9	+146	Seconardy teacher	2.2	-31
Writer or journalist	2.2	+ 16	Research scientist	1.6	-27
			Social worker	1.5	-44
			Law enforcement officer	.9	-47
			Clergymen	.7	-42

Sex

We have already seen that changes in the major field and career plans of college women have been much more dramatic than have those of the men. In subsequent sections we shall examine parallel changes in the attitudes and values of women and in student perceptions of the women's role in society. In this section we shall examine the representation of women in higher education and explore the possibility that the types of women attending college may have changed in recent years.

Since 1969 the sex composition of the entering freshmen class in American higher education has shown gradual but consistent changes. Specifically, women have changed from a minority of the entering freshmen class in 1969 43.4 percent) to a majority among today's freshmen (51.4 percent). Considering that the size of the total freshmen class has also increased during the same period (from 1.64 million to 1.73 million), this increase in the proportion of women is all the more remarkable. No doubt these changes are attributable in part to the effects of the women's movement (which seems to have had its first measurable effects in 1969) and, more recently, to the declining college attendence rates among men.

Has the type of woman entering college changed since 1966? Several lines of evidence suggest that there have been some change. For example, in 1966 the mothers of male freshmen were more likely never to have attended college (64.3 percent) than were the mothers of female freshmen (58.4 percent). By 1981, these percentages were almost identical: 53.1 and 53.8 percent, respectively, for men and women. At the same time, the freshmen male of today is more likely to have a college educated mother (26.2 percent) than is a freshmen female (24.6 percent). In 1966, the reverse was true: men were less likely (17 percent) than were women (19 percent) to have a college-educated mother.

Since similar patterns were found with the father's educational level, these trends show that today the less educated families are more likely to be sending their daughters to college than was the case fifteen years ago.

Similar trends can be observed in the income level of the students' parents. If we take the figure of $10,000 as a rough approximation to the median family income of college freshmen in 1966, we find that more of the males (55 percent) than females (52 percent) in those days came from families making less than $10,000 per year. Today, however, the pattern has reversed. Thus, if we take $25,000 as the approximate median family income of 1981 freshmen, we find more of the women (52 percent) than of the men (47 percent) coming from families making less than this amount.

In summary, these trends show that, whereas in 1966 the sons of less affluent and less well educated families in the United States were more likely to go to college than were the daughters, by 1981 the pattern has reversed, with the daughters of the poorer and less educated families more likely to attend college than the sons. These reversals are all the more remarkable when one realizes that the educational aspirations of women have increased substantially during the same time.

Race

With the advent of the Civil Rights movement in the 1950s and 1960s, a great deal of attention was focused on the fact that the disadvantaged minorities in the United States--blacks, Chicanos, Puerto Ricans and Amerian Indians--were severely underrepresented in our institutions of higher learning. Given that higher education serves as the principal gatekeeper for entry into the most prestigious and lucrative careers in our society, this lack of

representation posed a special obstacle for these groups' attempts to improve their situation within American society. Table 3 shows trends in the representation of these four minority groups among entering freshmen since 1966.

The representation of blacks among entering college freshmen increased substantially between 1966 and 1976, from 5.0 to 8.7 percent (a 74 percent increase). Since 1976, however, the figures have remained virtually unchanged. A slightly different pattern emerges for Chicanos: an increase from 1971 (the first year data were available) to 1976, followed by an apparent decline. For Puerto Ricans, the increase continued through 1979, but seems to have been followed by a decrease since that time. American Indian representation among entering freshmen increased between 1966 and 1971 but has changed very little during the past ten years.

Although these figures must be regarded with some caution because we are dealing with relatively small percents (particularly for Chicanos, Puerto Ricans, and American Indians), these increases in minority enrollments from the mid-1960s to the mid-1970s are particularly remarkable, given the substantial expansion in the absolute size of the entering freshmen class during that period. Nevertheless, it should be recognized that minority representation is still far below their representation in the general population. Blacks, for example, would have to increase their representation among entering freshmen by about 40 percent, and the two Hispanic groups would have to more than double their enrollments to achieve proportionate representation (see Astin, 1982). (Because of uncertainties in defining the American Indian population of the United States, it is difficult to estimate their degree of underrepresentation with any degree of precision.) Further, it should be noted that minority enrollments have not increased since the mid-1970s, and that they may even be on the decline.

TABLE 3

TRENDS IN FIRST-TIME, FULL-TIME FRESHMEN ENROLLMENTS, 1966-1980 (THREE YEAR MOVING AVERAGES)

Year	PERCENTAGE OF FRESHMEN CLASS			
	Blacks	Chicanos	Puerto Ricans	American Indians
1966	5.0			.6
1967	5.0			.7
1968	5.4			.6
1969	5.9			.5
1970[a]	6.2			.6
1971	7.5	1.1	.2	1.0
1972	7.6	1.3	.4	1.0
1973	8.0	1.4	.5	.9
1974	8.1	1.5	.6	.9
1975	8.3	1.6	.6	.9
1976	8.7	1.6	.7	.9
1977	8.4	1.4	.8	.8
1978	8.7	1.2	.9	.9
1979	8.8	1.4	.9	.9
1980	8.8	1.3	.8	.9
1981	8.6	.9	.6	1.0

Note. Figures for the first year (1966) and last year (1981) are based on only one year; all others are based on three years.

[a]Because of errors in the original 1970 weights, the 1970 figure represent an average of 1969 and 1971.

Source. Cooperative Institutional Research Program (1966-1981).

Although many factors are probably responsible for the dramatic increase in the representation of disadvantaged minorities among entering college freshmen, one obvious factor was the increased high school completion rates of these groups. During the 1960s and early 1970s the high school dropout rate for blacks decreased by at least 50 percent. At the same time, the greater underrepresentation of Hispanic minorities compared to blacks among entering freshmen is no doubt attributible in part to the fact that Hispanics drop out of high school at about twice the rate of blacks (see Astin, 1982). In other words, part of the key to increasing minority representation among American college students is to find ways to increase high school completion rates within these groups.

Age

The vast majority of full-time, first-time freshmen are either 18 years old (74 percent) or 19 years old (19 percent) at the time they enter college. A small fraction (2.6 percent) are less than 18 and the remainder (nearly 5 percent) are age 20 or older at the time of college entry. These facts are consistent with the findings that most (94 percent) of the entering freshmen graduated from high school in the same year that they entered college.

Although the average age of college students has been on the increase in recent years, the age of the first-time, full-time freshmen has changed very little since 1966. These apparently contradictory trends suggest that most, if not all, of the increases in adult representation is accounted for either by part-time students or by former college dropouts who return as full-time students.

Family Income and Finances

As would be expected, the family incomes of today's college freshmen are much higher than the family incomes of the freshmen entering college in 1966. These inflationary trends are examplified by the percentage of freshmen whose parents earn less than $10,000 per year. In 1966, more than half (54 percent) of the freshmen came from families earning less than $10,000 per year; by 1981, the figure had dropped to less than 12 percent. By contrast, the percentage of families with incomes of $30,000 or above increased nearly six-fold (from 5 to 39 percent) between 1966 and 1981. During these fifteen years the median family income of the college freshmen increased from less than $10,000 to nearly $25,000.

How students pay for college expenses? By far the most important source of support is parents: 69 percent of the 1981 freshmen are relying on parental aid. More than half of these (40 percent of all freshmen) are receiving $1,000 or more from their parents and more than a third (24 percent of all freshmen) are receiving over $2,000 in parental support. The two principal sources of outside financial aid are "Pell" grants from the federal government and federally guaranteed student loans (about 1 freshmen in 4 receives support from each of these sources). The amount of money received from these two sources differs considerably, however: whereas 22 percent of the freshmen receive at least a $1,000 in guaranteed students loans, only about 9 percent receive this much from Pell grants.

Although the freshmen survey has been obtaining detailed information on student finances only since 1974, some interesting trends have emerged in the seven years since that time. Students appear to be rely less on parental aid (from 80 percent to 69 percent) and state scholarships (from 19 percent to 14 percent) and more on guaranteed student loans (from 10 percent to

26 percent). (This latter increase coincided exactly with the removal of family income limitations several years ago.) Since 1967 students are also less likely to say that they are planning to work at an outside job while attending college (from 33 percent to 23 percent of the freshmen). It should be emphasized, however, that this latter figure has been stable since 1976.

While it is not clear how college finances affected students' choices of colleges, multiple applications have gone up in recent years. Whereas in 1969 only half (49 percent) of the freshmen reported applying to more than one college, this figure has risen steadily to the point where 62 percent of the 1981 freshmen reported having applied to more than one college. Also, since 1973 (the first year in which the Pell grants were available) the percentage of freshmen living at home with their parents has declined (from 42 to 30 percent), while the percent of freshmen living in college dormitories has increased (from 50 to 61 percent). Although it is difficult to attribute any causal relationships here to the effects of financial aid, it may well be that the substantial increases in financial aid during the late 1960s and early 1970s have broadened the high school senior's choices of institutions and allowed a larger number of students to live away from home on the college campus. Since a substantial body of research (Astin, 1977; Chickering, 1974) indicates that students benefit more from their undergraduate experience if they are able to live away from home on the campus during their freshmen year,these trends suggest that the quality of the undergraduate experience has been improved for a substantial proportion of the freshmen class.

Parental Education

About half of the 1981 freshmen are first generation college students. Fifty-one percent of the students' fathers have attended college, and thirty-

seven percent are college graduates. Thirty-nine percent of the students' mothers have attended college, and twenty-five percent are college graduates.

Trends since 1966 show a substantial increase in the educational level of the students' parents, no doubt reflecting the increase in the educational level of the U.S. population and, in particular, the large increase in college enrollments and the "baby boom" that followed the end of World War II. Many of today's college students were born during the years immediately following the end of that war. Thus, during the past 15 years the percentage of freshmen whose fathers have a college degree increased from 27 to 37, while the percent who never attended college declined from 54 to 49. Similarly, the percentage of freshmen whose mothers have college degrees increased from 18 to 25 during the fifteen year period, while the percent who never attended college declined from 62 to 54.

Personal Values

During each of its sixteen years the CIRP survey has included a list of fifteen to twenty items describing various personal values or "life goals." Students are asked to indicate whether each goal is essential, very important, somewhat important, or not important. The items cover values related to family, work, community, and self. By examining the percentages of students who consider each value as either esssential or very important, it is possible to identify the most popular values and also to chart trends in students' values since 1966.

Among today's (1981-82) entering freshmen, the three most important values are "becoming an authority in my field" (endorsed as either very important or essential by 73 percent of the freshmen), "raising a family" (67 percent), and "being very well-off financially" (65 percent). The three most

important values for the 1967 entering freshmen were "developing a meaningful philosophy of life" (83 percent), "becoming an authority in my field" (67 percent), and "helping others in difficulty" (62 percent).

Although many of the value statements have waxed and waned in popularity since the 1960s, two of the items have shown especially consistent and contrasting trends (Figure 7). The item showing the strongest upward trend is "being very well-off financially." During the past ten years student endorsement of this value has increased dramatically from 40 percent to 65 percent of the entering freshmen. The value showing the most precipitous decline in student endorsement is "developing a meaningful philosophy of life." As mentioned above, this value was the most popular one in 1967 (83 percent endorsement), but by 1981 it had dropped to seventh (49 percent endorsement).

Although men are still more likely than women to endorse the value of being very well-off financially, the gap between the sexes has narrowed considerably since 1967. Whereas endorsement by men increased moderately (from 54 to 71 percent), endorsement by women has more than doubled (28 to 61 percent). Declines in student commitment to "developing a meaningful philosophy of life" are only slightly less for men (79 to 48 percent) than for women (88 to 40 percent).

Although one can only speculate about the reasons for these contrasting patterns for these two values, it is possible that they reflect a common underlying shift in student values during the past decade. More specifically, it could be argued that acceptance of the goal of making a lot of money obviates the need for some students to develop a "meaningful philosophy of life." Indeed, it may be that some students view the making of money as a kind of "philosophy of life" in itself.

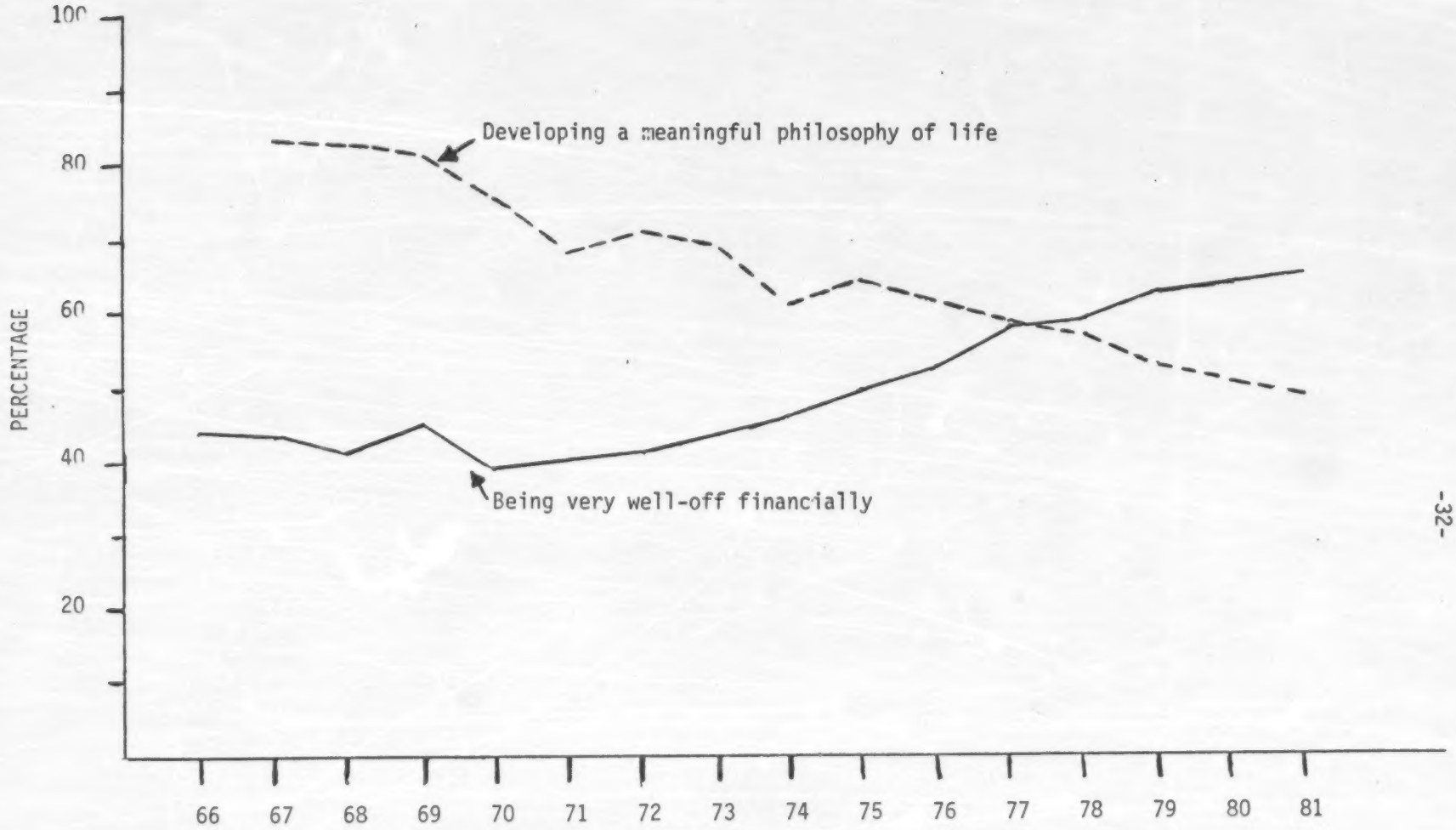

Figure 7: Trends in the percentage of freshmen who accept (as either "essential" or "very important" developing a "meaningful philosophy of life" and "being well-off financially."

Do changes in other value questions reflect similar trends? Table 4 shows those items that have shown consistent trends since 1972 (this year was chosen as the base year because there were either no trends or inconsistent trends prior to that time). Most of the items showing increases since 1972 are concerned with money, power, and status: being very well off financially, being an authority, having administrative responsibility for others, and obtaining recognition. By contrast, values showing the largest declines since 1972 relate to matters of altruisum and social concern: helping others, promoting racial understanding, cleaning up the environment, participation in community action programs, and keeping up with political affairs. Creative and artistic goals also showed declines during this period.

These contrasting patterns of value changes are highly consistent with the changes in student majors and career plans discussed earlier. Increased student interest in business, engineering, and computer science is accompanied by a strengthening of materialistic and power values, while decreased student interest in education, social science, the arts, and humanities is accompanied by declining altruism and social concern.

Attitudes

Each fall since 1967 the attitudes of the entering freshmen have been assessed by means of statements concerning a variety of controversial issues. The freshmen are asked to indicate whether they agree or disagree with each statement. Trends in freshman attitudes can be estimated by charting changes in the percent that agree ("strongly" or "somewhat") with each statement. To simplify the task of summarizing these results, it is convenient to divide the attitudinal statements into three broad categories: higher education, governmental policies, and sex and family.

TABLE 4

Values Showing the Largest Recent Changes (1972-1981)
Among Entering Freshmen

Increased[a] Endorsement			Decreased[a] Endorsement		
Value	% Endorsement in 1981	Change since 1972	Value	% Endorsement in 1981	Change since 1972
Becoming an authority in my field	73	+12	Helping others in difficulty	63	- 4
Being very well off financially	65	+25	Developing a meaningful philosophy of life	49	-21
Obtaining recognition from my colleagues	55	+ 8	Keeping up with political affairs	39	-10
Being successful in a business of my own	49	+ 5	Promoting racial understanding	31	- 5[b]
Having administrative responsibility for the work of others	40	+16	Becoming involved in programs to clean up the environment	25	-20
Making a theoretical contribution to science	14	+ 4	Participating in a community action program	24	- 5
			Creating artistic works (painting, sculpture, decorating, etc.)	13	- 5
			Writing original works (poems, novels, short stories, etc.)	12	- 2

a. Percentage of freshmen who say attainment is either "essential" or "very important."

b. Change since 1977 (first year the value was used).

Higher Education

Trends in student attitudes regarding various higher education issues are shown in Table 5. When it comes to matters of student autonomy and student power, today's freshmen are much more supportive than was the case with freshmen in the late 1960s. Thus, the freshmen of 1981 are more inclined than those in the late 1960s to feel that faculty promotions should be based in part on student evaluations, and less inclined to feel that college officials have the right to censor student publications, to prevent controversial figures from speaking on the campus, and to regulate student behavior off campus. It should be emphasized that these changes all occurred prior to 1977, and that there has been a slight reversal of support for student autonomy since that time.

The most dramatic change has occurred in response to the proposal that "College grades should be abolished." This item reached its peak of popularity in 1969 (44 percent endorsement) and has declined steadily since that time (15 percent endorsement in 1981). In part these changes may reflect growing student disenchantment with "pass-fail" and other grading innovations that were tried in the late 1960s and early 1970s. Among other things, many students may now feel that they will be at a disadvantage competing for jobs or for admission to graduate and professional school if their undergraduate work has not been assessed in terms of traditional grade point averages.

Two more items in Table 5 have to do with college admissions. Only about one freshmen in three subscribes to the concepts of open admissions or of preferential treatment for disadvantaged students. This represents a slight decline from 1971, alhtough student opinion on these issues has changed little since 1977. An additional item relating to admissions, which was discontinued in 1980 because it failed to show any distinctive trends, had been consistently

Table 5

Changes in Freshmen Attitudes About Higher Education, 1967-77-81

Item	Percent Agreement in 1981	Change since 1977	Change since 1967
Faculty promotions should be based in part on student evaluations	70	- 2	+10
Student publications should be cleared by college officials	42	+ 6	-10
Disadvantaged students should be given preferential treatment in college admissions	37	0	- 6[a]
Open admissions (admitting anyone who applies) should be adopted by all publicly-supported colleges	34	- 1	- 3[a]
College officials have the right to ban persons with extreme views from speaking on campus	26	+ 1	-14
College grades should be abolished	15	- 5	-29[b]
College officials have the right to regulate student behavior off-campus	15	+ 1	- 8[c]

a. Change since 1971 (first year the item was used).

b. Change since 1970 (first year the item was used).

c. Change since 1968 (first year the item was used).

endorsed by 80 percent of the entering freshmen over a period of several years: "Even if it employs open admissions, a college should use the same performance standards in awarding degrees to all students." Apparently, most students who endorse open admissions or other special admission programs support the idea of uniform graduation standards.

Governmental Policies

Since 1969 a number of questions relating to governmental policy regarding various social and economic issues have been included in the CIRP survey. Trends in student support for particular government policies are shown in Table 6. Despite the current public controversy over "big government," large majorities of today's college freshmen (70-80 percent) feel that the federal government should take a more active role in consumer protection, control of environmental pollution, and energy conservation. Further, a slight majority (55 percent) supports a national health care plan. Trend data for all these items, however, suggest that this support for greater governmental action has been on the decline. Further, there has been a clear-cut trend during the past 12 years toward greater agreement with the statement, "There is too much concern in the courts for the rights of criminals." Similarly, student support for abolishment of the death penalty has been weakening: whereas a majority of 1969 freshmen (54 percent) supported abolishing the death penalty, fewer than one-third of the 1981 freshmen (30 percent) suport this idea. Although only a minority (44 percent) of today's freshmen support school busing, there has been a slight increase in student support for busing during the past four years.

One of the most interesting items concerns the legalization of marijuana. Starting in 1969, student support for the legalization of marijuana increased

Table 6

Changes is Freshmen Attitudes About Governmental Policies, 1969-77-81

Item	Percent Agreement in 1981	Change since 1977	Change since 1969
The Federal government should do more to discourage energy consumption	80	- 2	- 1[a]
The Federal government is not doing enough to control environmental pollution	78	- 4	-13[b]
Wealthy people should pay a larger share of taxes than they do now	71	- 2	- 2[c]
The Federal government is not doing enough to protect the consumer from from faulty goods and services	70	- 3	- 7[b]
There is too much concern in the country for the rights of criminals	69	+ 5	+15
A national health care plan is needed to cover everybody's medical costs	55	- 6	NA
Urban problems cannot be solved without huge investments of Federal monies	46	- 2	- 5[d]
Busing is O.K. if it helps to achieve racial balance in the schools	44	+ 3	NA
Marijuana should be legalized	34	-19	+15
The death penalty should be abolished	30	- 3	-24

a. Change since 1975 (first year the item was used).
b. Change since 1971 (first year the item was used).
c. Change since 1972 (first year the item was used).
d. Change since 1968 (first year the item was used).

dramatically to the point where a majority (53 percent) supported the idea in 1977. Since that time, however, there has been a sharp decline in support, so that only one-third of today's freshmen support legalizing marijuana. Despite this decline, the level of support for legalizing marijuana is still considerably higher than it was in 1969. Whether this recent decline represents declining usage or simply a growing awareness of the potential dangers of marijuana use is not clear. (In this regard, it should be noted that the use of alcohol among college freshmen has been increasing substantially during recent years; see below.)

The CIRP surveys have documented interesting changes in how students label themselves politically. The item used to assess political affiliations permits students to identify themselves as belonging in one of five categories: far left, liberal, middle-of-the-road, conservative, and far right. The largest and most consistent trend has occurred in the liberal and far left categories, which have declined from a total of 38 percent in 1970 to only 20 percent in 1981. At the same time the middle-of-the-road category has increased by almost the same amount (from 47 to 60 percent), while the conservative category has increased modestly (from 15 to 21 percent). Thus, whereas students on the left of the political spectrum outnumbered those on the right by better than two-to-one eleven years ago, those on the right now slightly outnumber those on the left. These changes in political self-labels appear to be consistent with the value changes discussed above (greater materialism, less altruism and less social concern).

Sex and Marriage

The final category of attitudinal items concerns student attitudes toward sex and marriage. The item showing the largest and most consistent trends concerns the role of women: "The activities of married women are best confined

to the home and family." Student endorsement of this traditional view of the woman's role has declined dramatically since 1967 (see Figure 8). Even though men are still more likely than women to support this view (35 versus 19 percent), the decline in support among the men (67 to 35 percent) has been just as sharp as the decline among wome (44 to 19 percent). Despite evidence of conservative trends on other issues discussed in the preceding section, there does not appear to be any sign of similar trends in views on the role of women among either male or female freshmen during recent years.

Trends on other items relating to sex and marriage are summarized in Table 7. Two of these items show further evidence of changing student views toward women. For example, support for equal job opportunities for women has increased from 81 to 93 percent since 1969. And even though only 21 percent of the 1969 freshmen felt that women should be subject to the draft, this idea is now supported by a majority of today's freshmen (51 percent). It should be noted, however, that support for drafting women is much stronger among the men (66 percent) than among the women (37 percent). Although a majority of students (54 percent) believe that abortions should be legalized, support for this idea has been declining since 1969, as has support for the idea that parents should be discouraged from having large families. Students are about equally divided on whether there should be laws prohibiting homosexual relationships, and sentiment on this issue does not appear to have changed in recent years. Although support for the liberalization of divorce laws has increased in 1969, there has been a decline in support for this proposal since 1977.

Two other items in Table 7 relate to premarital sex: living together before marriage, and sexual relations among people who have known each other for a very short time. About half of the 1974 freshmen supported both of these proposals, but support has declined slightly since that time. More

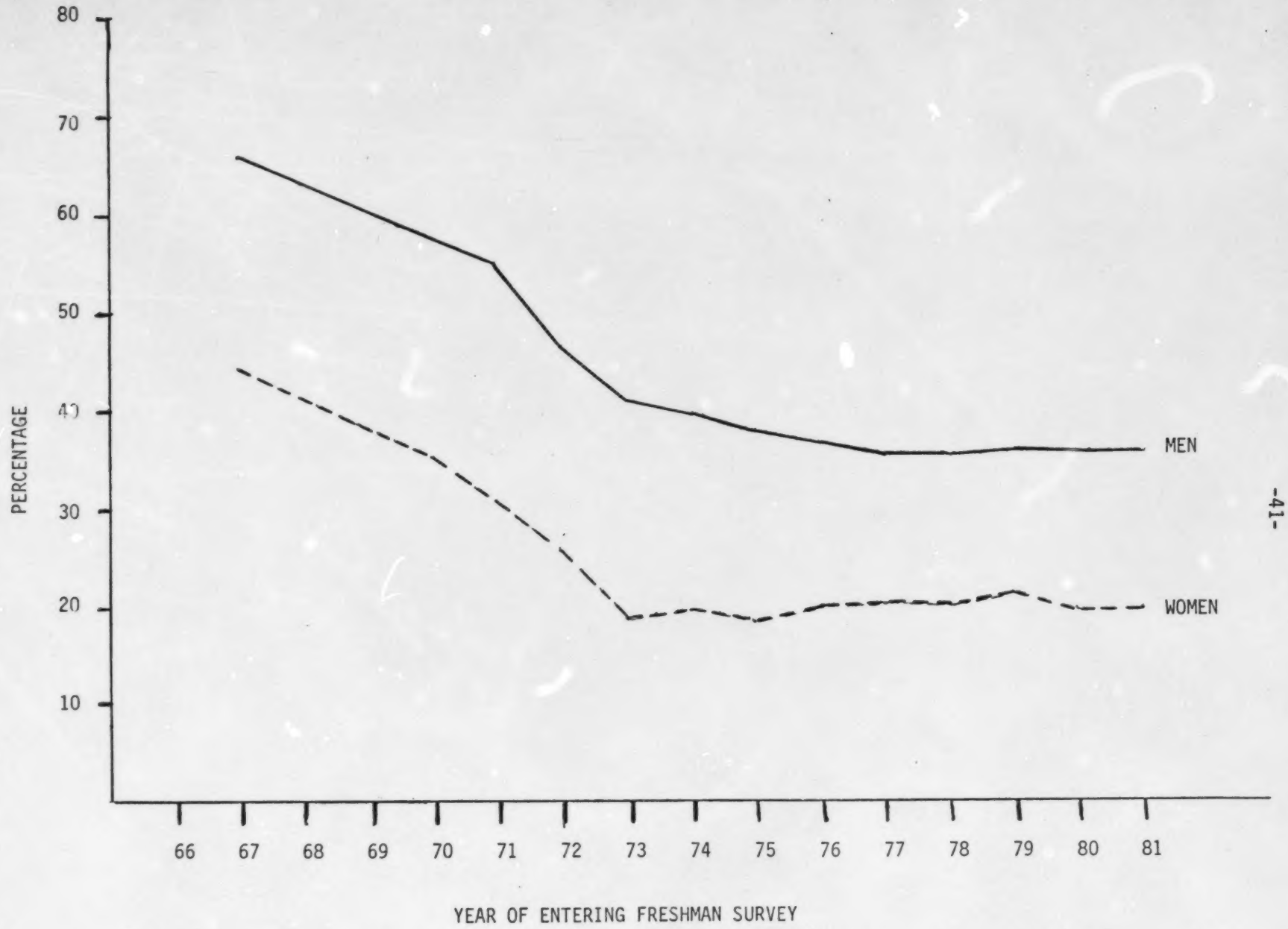

Figure 8: Trends, by sex, in the precentage of freshmen agreeing that "the activities of married women are best confined to the home and family."

Table 7

Changes in Freshmen Attitudes Toward Sex and Family, 1969-77-81

Item	Percent Agreement in 1981	Change since 1977	Change since 1969
Women should receive the same salaries and opportunities for advancement as men in comparable positions	93	+ 1	+12[a]
Abortions should be legalized	54	- 2	-22
Women should be subject to the draft	51	NA	+30
It is important to have laws prohibiting homosexual relationships	49	0	NA
If two people really like each other, it's all right for them to have sex even if they've known each other for only a very short time	47	- 3	+ 1[b]
Divorce laws whould be liberalized	44	- 5	+ 3
A couple should live together for some time before deciding to get married	43	- 6	- 3[b]
Parents should be discouraged from having large families	42	-11	-27
The activities of married women are best confined to the home and family	27	- 1	-30[d]

a. Change since 1970 (the first year this item was used).
b. Change since 1974 (the first year this item was used).
c. Change since 1971 (the first year this item was used).
d. Change since 1967 (the first year this item was used).

important, however, are the profound differences between the sexes on these issues. A solid majority of men (63 percent) and only one-third of the women (32 percent) support the idea of sex between people who have only known each other for a short time. Men are also more likely than the women to support living together before marriage (48 versus 38 percent). Thus, despite the dramatic changes in the views of both sexes toward the traditional woman's role and equal rights for women, men are still much more likely than the women to suport casual sex and premarital sex.

Self-Concept

The students' self-concept has been assessed by means of a list of traits on which the students are asked to rate themselves "compared with the average student of your own age." Changes in self-concept are assessed by charting the percentage of students who rate themselves above average. The list of self-ratings has been repated in four surveys (1966, 1971, 1974, and 1980). The most recent group surveyed (1980 freshmen) are most inclined to rate themselves above average in "understanding of others" (70 percent), "drive to achieve" (64 percent), "cheerfulness" (58 percent), and "academic ability" (52 percent). Students are least likely to rate themselves above average in "political conservatism" (13 percent), "political liberalism" (15 percent), "artistic ability" (22 percent), "public speaking ability" (24 percent), "sensitivity to criticism" (24 percent), and "mechanical ability" (26 percent).

Perhaps the most remarkable trend over recent years is that there seems to be a general tendency for students to see themselves in a more positive light. Of the 17 ratings which concern either abilities (academic, artistic, and so forth) or desirable personal traits (popularity, understanding of others, and so forth), all but one (academic ability) showed significant

upward trends. The largest increases since 1966 are in the percentages of freshmen who rate themselves above average in understanding of others (from 60 to 70 percent), social self-confidence (30 to 41 percent), and intellectual self-confidence (36 to 46 percent). This latter trend is especially interesting, given the parallel declines in self ratings on academic ability and in students' academic skills. Apparently, freshmen do not necessarily link their intellectual self-confidence to their academic abilities.

Not surprisingly, self ratings on intellectual liberalism and conservatism showed contrasting patterns. Thus, between 1966 asnd 1971, the percentage of students rating themselves above average in conservatism declined (from 15 percent to 9 percent), while the percentage rating themselves above average in liberalism increased (from 19 to 23 percent). Between 1971 and 1980, on the other hand, these ratings reversed themselves almost to the 1966 levels (to 13 percent above average in conservatism and 15 percent above average in liberalism).

Behavior Patterns

Periodically the CIRP freshman survey has asked students to indicate how frequently they engaged in various behaviors. In response to each behavioral description (e.g., played a musical instrument), the students are asked to indicate whether during the past year they engaged in the behavior frequently, occasionally, or not at all. The most consistent pattern of behavioral change since the late 1960s suggests that students are becoming considerably more health-conscious. Thus, the percentage of students who take vitamins has increased (from 61 to 65), while there have been declines in the percentages who smoked cigarettes frequently (from 17 to 12 percent), take tranquilizers (from 10 to 5 percent), and take sleeping pills (from 6 to 3 percent). It should be noted, however, that the smoking patterns for men and women differ markedly. Thus, while the percentage of men who somke cigarettes frequently

has been cut by more than half since 1966 (from 19.4 to 8.6 percent), the percentage of women who smoke frequently has increased (from 13.2 to 15.0 percent). The sharpest increase in frequent smoking among women occurred between 1968 (12 percent) and 1978 (17 percent), possibly reflecting the influence of the Women's Movement. The slight decline in female smoking habits between 1978 and 1981 may reflect a growing awareness of the hazards of smoking.

Despite the apparently greater health-consciousness of today's freshmen, the percent who report drinking beer has increased sharply (from 54 to 75 percent) since the late 1960s. Although the frequency of beer drinking among men has increased substantially (from 64 to 81 percent), the increase has been even greater among women (from 41 to 70 percent). That these changes might represent greater declining parental control over the behavior of high school students is reflected in the increased percentage of students who reported that they "stayed up all night" (from 63 to 71 percent between 1966 and 1981). There has also been a decline in the percentage of students who attend religious services at least occasionally (from 91 to 86 percent), although it should be noted that the frequency of this behavior has remained stable since 1971.

Despite the decline in the publicity given to student protests, the percentage of 1981 freshmen who report that they participated in demonstrations in high school has actually increased (from 16 to 20 percent) since 1972. The increase among women has been greater (from 15 to 21 percent) than that for men (from 16 to 19 percent). These facts would suggest that, regardless of the political climate, student participation in demonstrations has become a regular occurrence on high school campuses.

Between 1966 and 1981 there was also a substantial decline (from 51 to 42 percent) in the percentage of students who played musical instruments. Once again, the change for women was more pronounced (from 60 to 46 percent) than the change for men (from 44 to 38 percent). These trends are consistent with the findings reported earlier concerning decreased student musical competency, decreased interest in majoring in the performing arts, and decreased commitment to artistic values.

Summary

In this paper we have observed a number of significant trends in the characteristics of students who go directly on to college after completing high school. The major trends can be summarized as follows:

1. Today's entering college students are less well prepared academically than entering students of 10 or 15 years ago. This poorer preparation is reflected not only in the well-publicized decline in scores on college admissions tests, but also in the students' greater expressed need for remedial work and college professors' comparisons of contemporary students with earlier generations of students. Although the reasons for these declines are not entirely clear, one likely contributing factor is in the "watering down" of the high school curriculum. This reduction in the number of basic academic subjects may also explain the substantial "grade inflation" that took place in the high schools between 1969 and 1977.

2. Declining academic skill levels may also be responsible not only for the declining rate of college attendance among high school graduates (especially white males), but also for the sharp decline in student majors in mathematics and in fields that require verbal skills (humanities and social sciences).

3. Declining academic skills have also been accompanied by declines in other areas of student compentency (including musical skills), and by declining interest among men in pursuing graduate study).

4. Dramatic changes have occurred in students' maor fields and career plans during the past decade. Today's students are much more interested in the fields of business, engineering, and computer sciences, and much less interested in education, social science, the fine and performing arts, and the humanities. Most recently, there has also been a decline in student interest in sciences. These changes will make it increasingly difficult for colleges and universities to maintain high quality liberal arts programs in years to come.

5. Changes in students' career and major field of study plans have been accompanied by parallel changes in values and attitudes: Today's students in comparison to any previous group since 1966, are (a) more materialistic, and more interested in power and status; and (b) less altruistic and less inclined to be concerned about social issues and problems.

6. Although today's freshmen are still strongly supportive of greater government involvement in matters such as protecting the environment, consumer protection, and energy conservation, this support has declined in recent years. Freshmen of today are also substantially less liberal in their political identification than freshmen of ten years ago.

7. One of the most dramatic changes during the past 12 years has been in the aspirations of freshmen women and in how women are viewed by both sexes. Compared to earlier generations, today's college women are much more likely to be pursuing the traditionally "male" careers in business, medicine, law, and engineering, and significantly less likely to be pursuing careers in school teaching and nursing. Women have also tended to become more like the men in their values and behavior patterns. At the same time, both men and women are more likely than ever to endorse equality for women and to reject the idea that activities of married women should be confined to the home and family.

8. Since the late 1960s there have been substantial increases in the the representation of women and disadvantaged minorities (blacks, Hispanics, and American Indians) among entering freshmen. Although minorities (especially Chicanos and Puerto Ricans) are still underrepresented among college students, their numbers could be substantially increased if their dropout rates from high school could be reduced.